

**Work Order ID 80301****\*80301\***

Page 1

February-16-12 10:30:47 AM

Item ID: D3391-023

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mid Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan: M.L.J.Date: 12/02/16 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

**\*100\***

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Cut tube to finish length as per Dwg D3391

2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

3-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

4-Remove .030" from Fwd indexing Ridge as per Dwg D3391

5-Remove indexing ridge on Fwd &amp; Aft end of skidtube as per Dwg D3391

6-Deburr

7-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,  
\*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG8-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391  
\*\*\*DO NOT OPEN 2 MOST FWD WEARPLATE HOLES\*\*\*

9-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391

12/02/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 80301****\*80301\***

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Item ID: D3391-023  
Revision ID:  
Item Name: Mid Tube Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***  
Stop **\*NS2\***

Start Date: 16/02/2012 Start Qty: 1.00  
Required Date: 01/03/2012 Req'd Qty: 1.00

**\*1\***  
**\*1\***

Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	10-Open .375" holes to .438" ***do not open fwd saddle holes***								
	11-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)								
	12- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021								
	13- Using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.								
	14- Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplte holes in D3391-021 using DT8937								
	15- Open 12 wearplate holes in D3391-021 to 0.297" dia.								
	16-Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.								

BB 12/02/19

De 12/03/07

110

QC5- Inspect part completeness to step on W/O

0.00

**\*110\***  
QC

Quality Control

Memo

0.00

S. 12/01/07

a

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 80301****\*80301\***

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Item ID: D3391-023  
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Start Date: 16/02/2012 Start Qty: 1.00  
Required Date: 01/03/2012 Req'd Qty: 1.00  
Reference:

Accept

**\*N900040100\***

Setup Start **\*NS1\***  
Stop **\*NS2\***

Cust Item ID:

Customer:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*120*</b>									
HandFinish	Memo	0.00							
Hand Finishing									
130	QC3- Inspect Part Finish	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									

① 76/12-3-7

DD 12-3-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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February-16-12 10:30:47 AM

\*80301\*

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Item ID: D3391-023  
Revision ID:  
Item Name: Mid Tube Assembly

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Start Date: 16/02/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140	Skidtubes	0.00							
*140*									
Skidtubes	Memo	0.00							
Skidtubes	1-Open float bag holes as per dwg 2-C'sink float bag holes as per dwg 3- Prepare tube for welding 4-Bond web in place as per Dwg D3391 & QSI 015. Adhere for 12 hours) A/R Sikaflex exp: 2012-08-13 batch#: m120813 NOTE:ENSURE WEB IS INSERTED IN AFT END OF TUBE								

150 QC5- Inspect part completeness to step on W/O 0.00

\*150\* QC Memo 0.00

Quality Control

1 0 CF 12-3-7

1 0 BE12-03-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



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\*80301\*

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Revision ID:  
Item Name: Mid Tube Assembly

Accept

\*N900040100\*

Setup Start \*NS1\*  
Stop \*NS2\*

Start Date: 16/02/2012 Start Qty: 1.00 \*1\*  
Required Date: 01/03/2012 Req'd Qty: 1.00 \*1\*

Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start \*NR1\*  
Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
*160*									
Skidtubes	Memo	0.00							
Skidtubes	1-Weld crossbolt spacer as per dwg D3391 & QSI 004 2-grind weld flush								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
*170*									
QC	Memo	0.00							
Quality Control									
180	QC5- Inspect part completeness to step on W/O	0.00							
*180*									
QC	Memo	0.00							
Quality Control									

A/R 11/20/16

S. 12/13/16

S. 12/13/16

1 0 BE 12/13/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80301

\*80301\*

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February-16-12 10:30:47 AM

Item ID: D3391-023 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Mid Tube Assembly  
 Start Date: 16/02/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 01/03/2012 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185	Pressure Wash per QSI005 4.3	0.00							
*185*									
HandFinish	Memo	0.00							
Hand Finishing	AND REALODINE AS PER PAR09-043								
190	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
*190*									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 3:40								
	OVEN TEMPERATURE: 320°F								
	FINISH TIME: 4:10								
200	QC3- Inspect Part Finish	0.00							
*200*									
QC	Memo	0.00							
Quality Control									

1X/m/ 12/03/08

1X/m/ 12/03/09

1 6 12/03/12

m120222

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 80301****\*80301\***

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Item ID: D3391-023

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mid Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

210

**\*210\***

Skidtubes

Skidtubes

Skidtubes

Memo

1- insert D3391-021 into D3391-23

2- insert T-pins into first and third fwd saddle holes

3- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per DSI 9364

4- remove T-pins and locate DT9415 from first and third crossbolt hole using T-pins and clekos

5- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". Remove DT9415

6- deburr, re-alodine and blow out chips

7- press fit D3591-1 spacers using DT9416 starting from 0.500" side

0.00

0.00

0.00

0.00

220

**\*220\***

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

8/26/13

1 φ 44 2603/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80301

February-16-12 10:30:47 AM

**\*80301\***

Page 8

Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Mid Tube Assembly  
 Start Date: 16/02/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 01/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	HandFinishing	0.00							
<b>*230*</b>	HandFinish	0.00							
Hand Finishing	<div> <div> <div></div> <div>Memo</div> </div> <div> <div></div> <div>Install Inserts as per Dwg</div> </div> </div>								
240	QC5- Inspect part completeness to step on W/O	0.00							
<b>*240*</b>	QC	0.00							
Quality Control	Memo								
250	Identify as per dwg & Stock Location: <u>w/o</u>	0.00							
<b>*250*</b>	Packaging	0.00							
Packaging	Memo								

*5/12/12*

*0412-7412-043/381085*

*1 0 12/03/12*

*1 0 12/03/12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 80301

February-16-12 10:30:47 AM

**\*80301\***

Page 9

Item ID: D3391-023

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Mid Tube Assembly

Stop

**\*NS2\***

Start Date: 16/02/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

260

QC21- Final Inspection - Work Order Release

0.00


**\*260\***

QC

Memo

0.00

Quality Control

12/3/14 

012-03-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Picklist Print

February-16-12 10:30:51 AM

Page 1

Work Order ID: 80301

\*80301\*

Parent Item: D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A05.10.20New Issue KJ/EC  
 IPP B06.02.10ECN773 dwg rev.D EC  
 IPP C 07.03.20 rev F dwg EC  
 IPP D 07.03.28 re-format EC  
 IPP E 07.10.31 ecn 1053P EC  
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC  
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC  
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC  
 IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP  
 Rev:J add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2500-1-100

Manufactured No

100

Each

45.0000

1

1

\*D2500-1-100\*

Skidtube Extrusion

\*\*

12/02/19

Location

Loc Qty

Loc Code

HALL

45

50251

45

D3391-021

Manufactured No

100

Each

0.0000

1

1

\*D3391-021\*

Fwd Tube Assembly

\*\*

12/03/07

D3389-1

Manufactured No

140

Each

2.0000

1

1

\*D3389-1\*

Web

\*\*

CF 12-3-7

Location

Loc Qty

Loc Code

LG

2

77681

1

77682

1

B 80909

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

February-16-12 10:30:51 AM

Work Order ID: 80301

\*80301\*

Parent Item: D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3681-1 Manufactured No

160 Each 79.0000 5 5

\*D3681-1\*

Spacer

\*\*

BE 12/03/08

Location	Loc Qty	Loc Code
LG001	79	
68958	2	
69893	2	
71845	2	
74874	11	
76004	2	
77501	60	

5

D3591-1 Manufactured No

210 Each 23.0000 2 2

\*D3591-1\*

Bushing

\*\*

ll 12/03/12

Location	Loc Qty	Loc Code
FP	20	
77496	20	
FP013	2	
77570	2	
ST055	1	
57350	1	

X2

ALS4-1032-130 Purchased No

230 Each 2,115.000 20 20

\*AI S4-1032-130\*

Insert

\*\*

ll 12/03/12

Location	Loc Qty	Loc Code
ST280	1116	
119084	116	
120671	1000	
ST281	999	
119632	19	
120410	980	

✓ 70

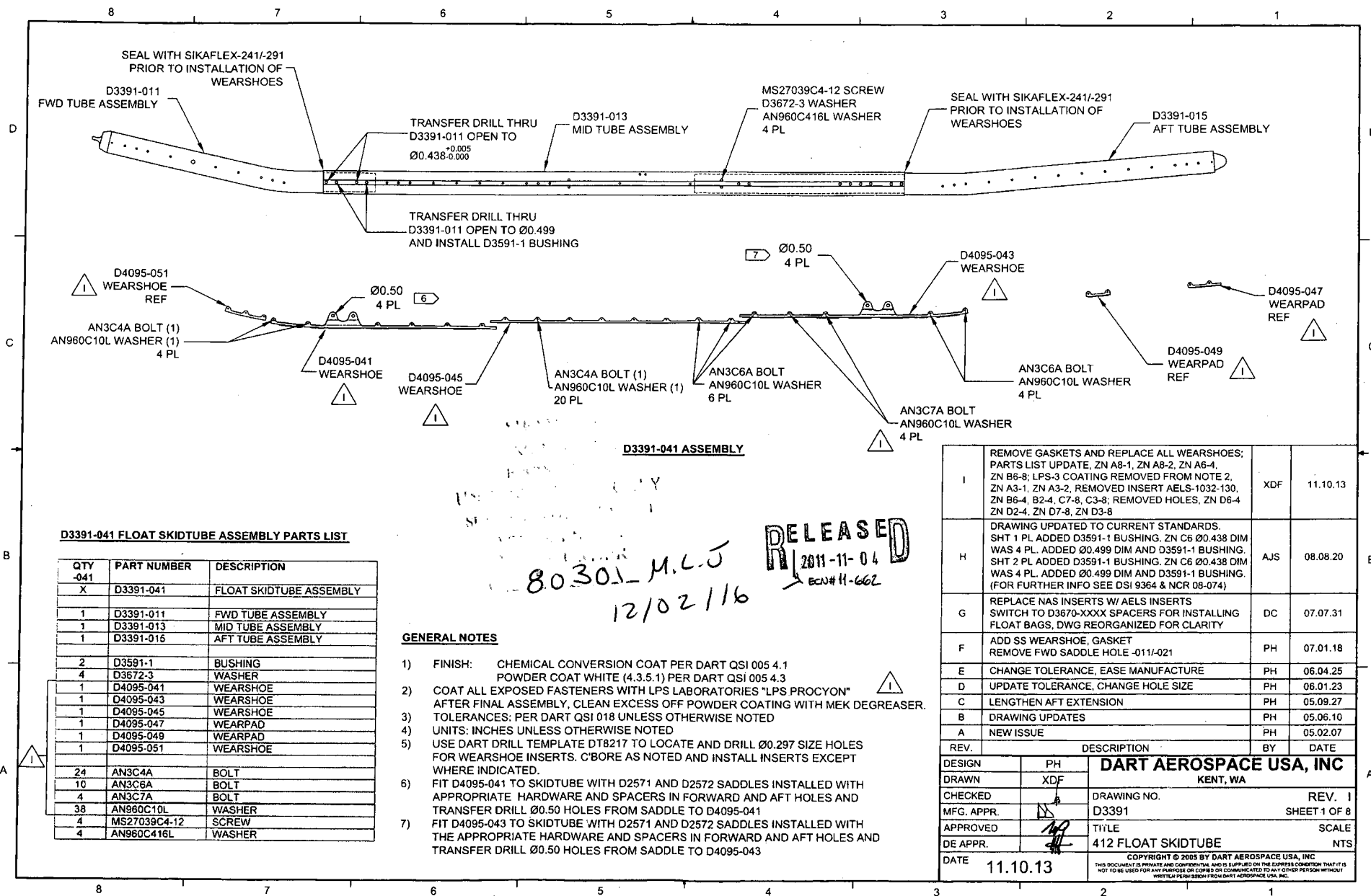
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

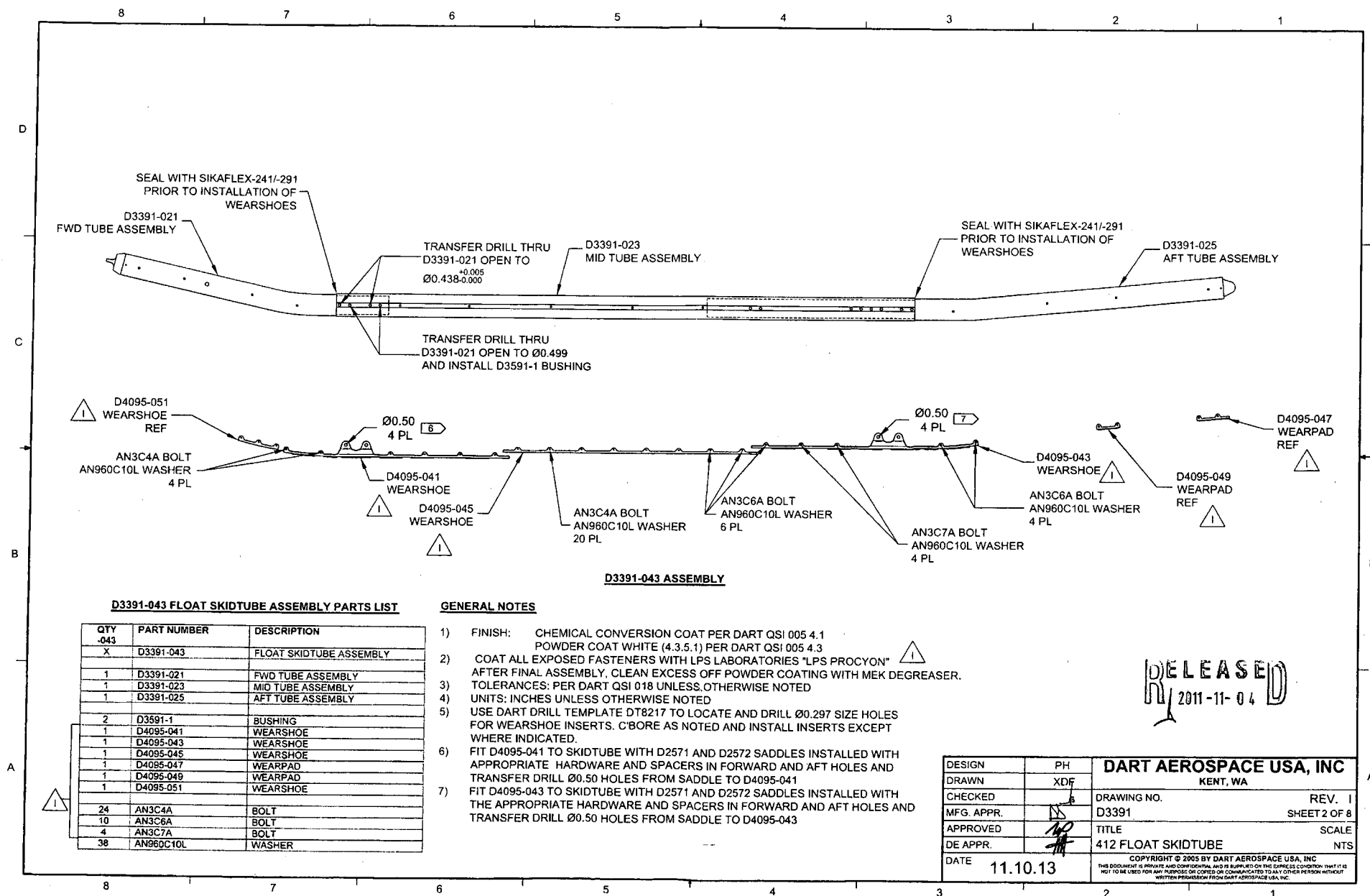
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



80301



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

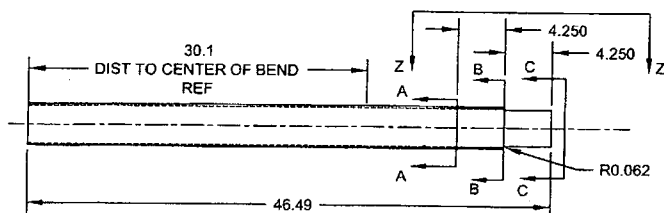
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

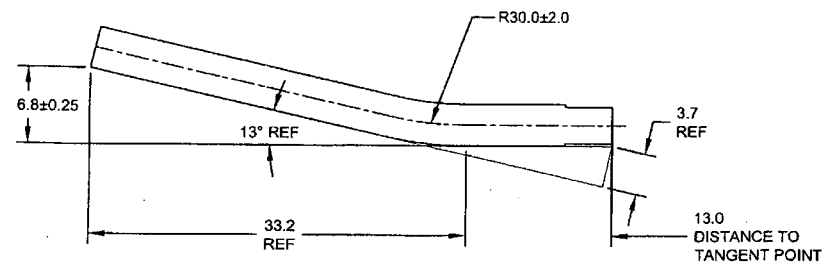
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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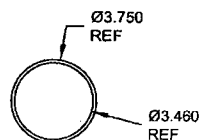
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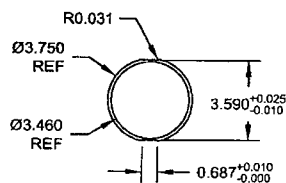
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



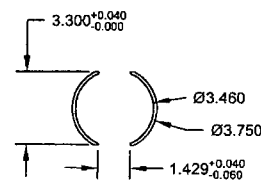
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



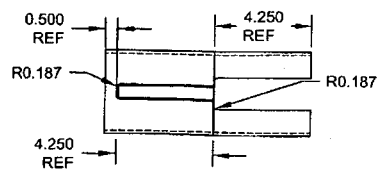
**SECTION A-A**  
SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

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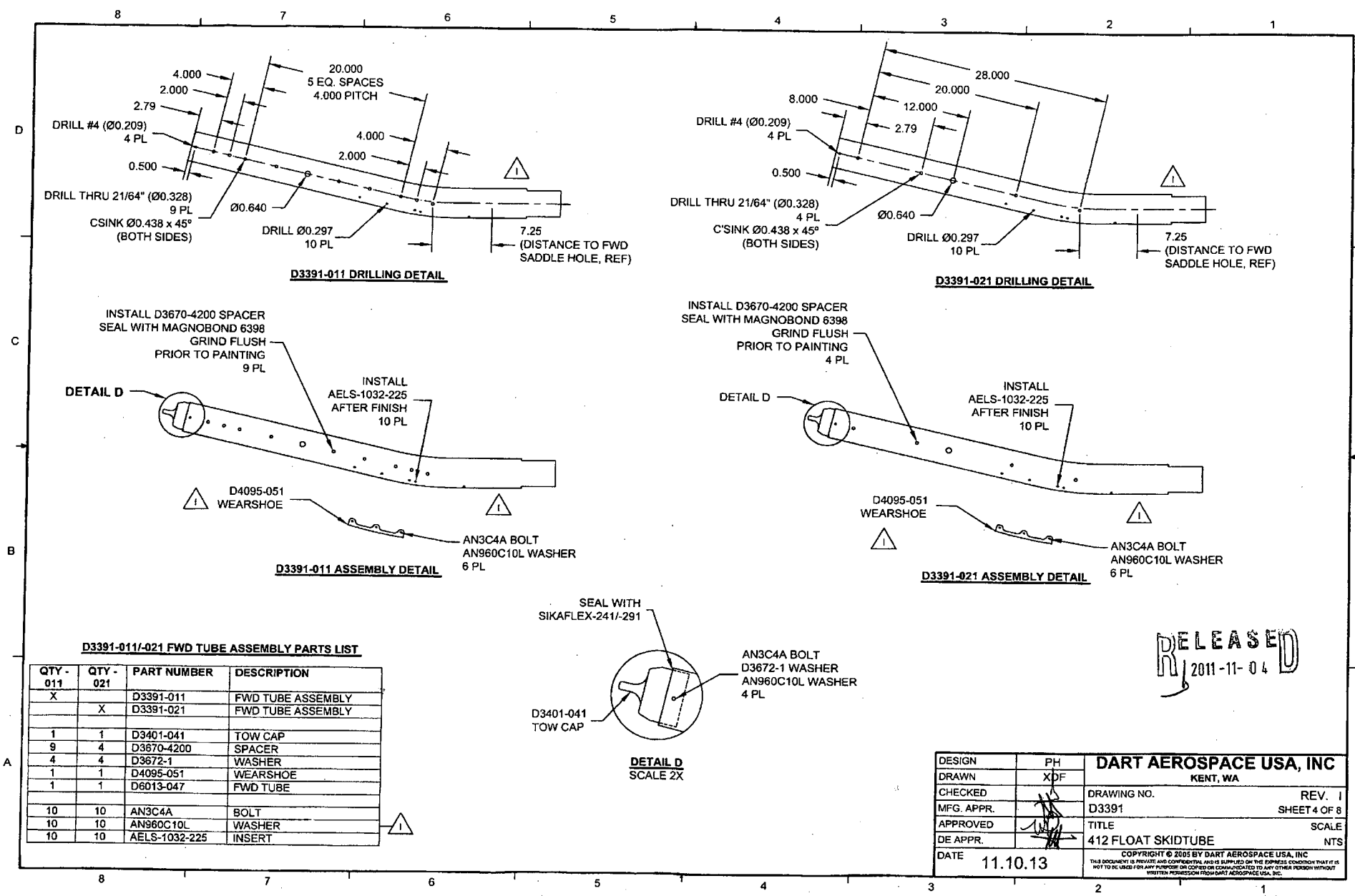
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

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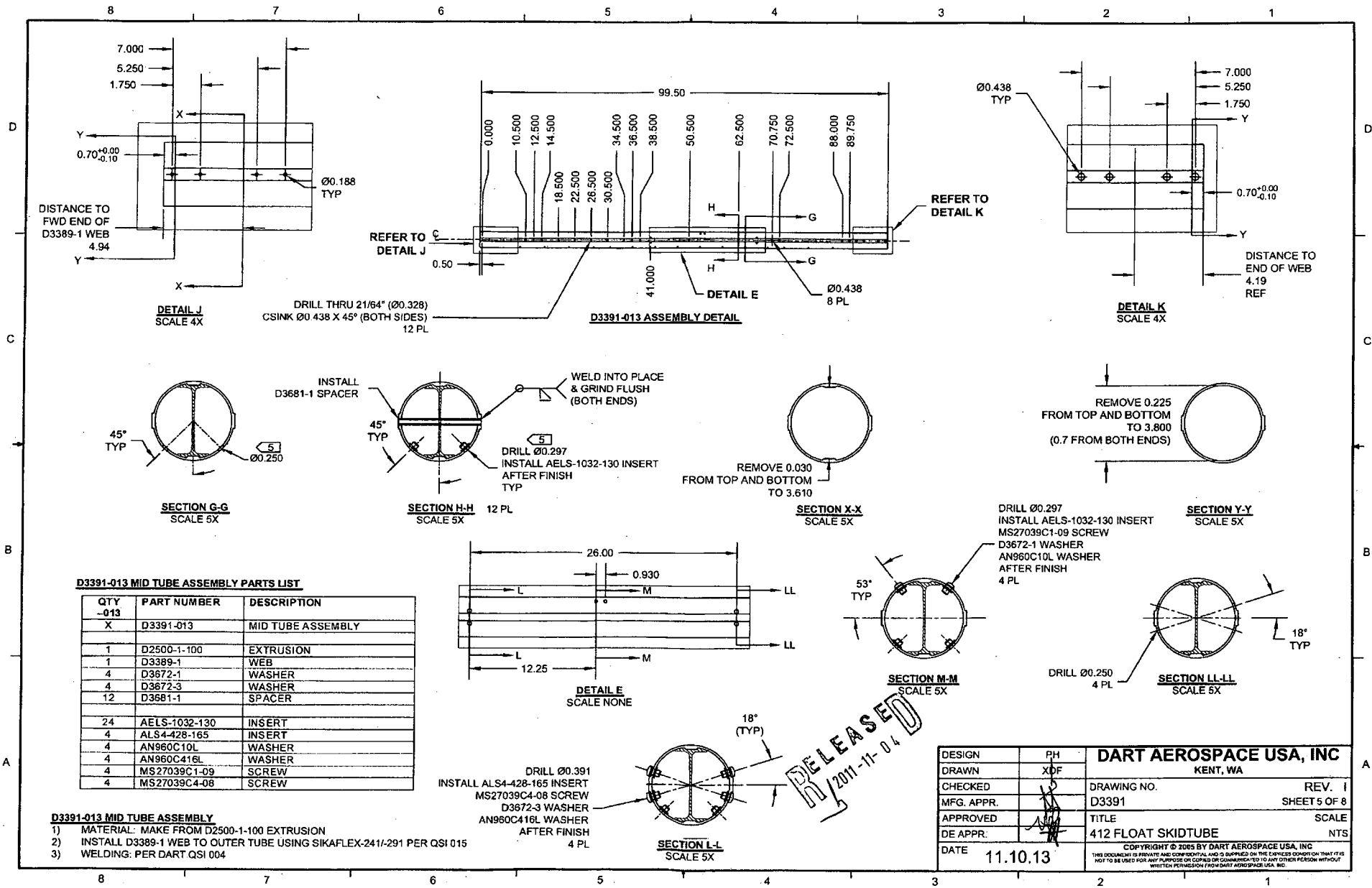
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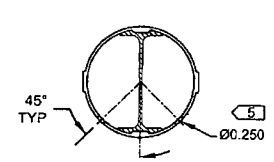
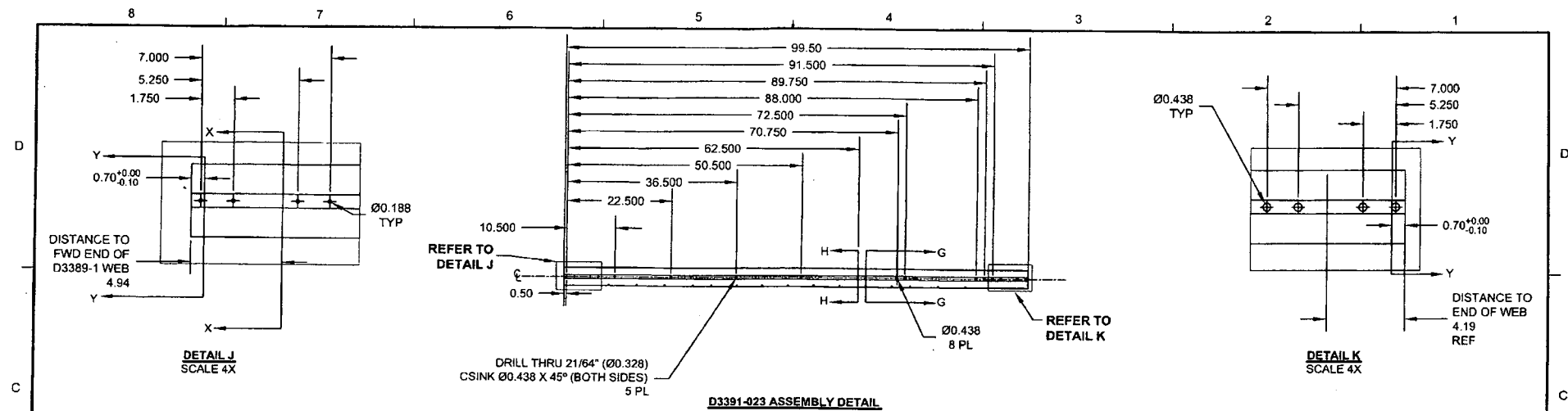
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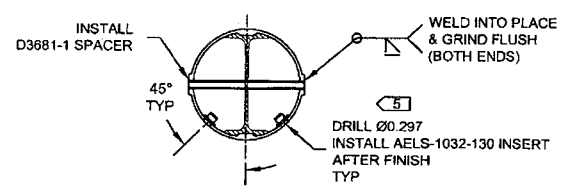
**NOTE:** Date & initial all entries



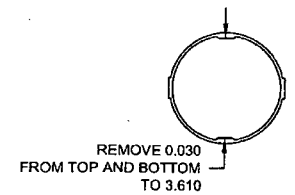
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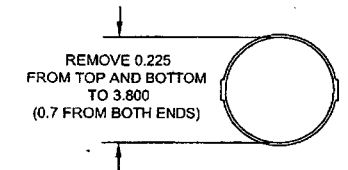
SECTION G-G  
SCALE 5X



SECTION H-H  
SCALE 5X



SECTION X-X  
SCALE 5X



SECTION Y-Y  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

**D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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**VIEW BB-BB**  
SCALE 4X

**DETAIL S**

**MACHINE CONSTANT TAPER FROM Ø3.750 TO Ø3.200**

**DETAIL V**  
SCALE 6X

**D3391-3 AFT DRILLING AND CUTTING DETAIL**  
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)

**SECTION AA-AA**  
SCALE 6X

**SECTION N-N**  
SCALE 6X

**SECTION P-P**  
SCALE 6X

**SECTION Q-Q**  
SCALE 6X

**SECTION R-R**  
SCALE 6X

**DETAILS**  
SCALE 4X

**VIEW W-W**  
SCALE 4X

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MFG. APPR.		D3391	SHEET 7 OF 8
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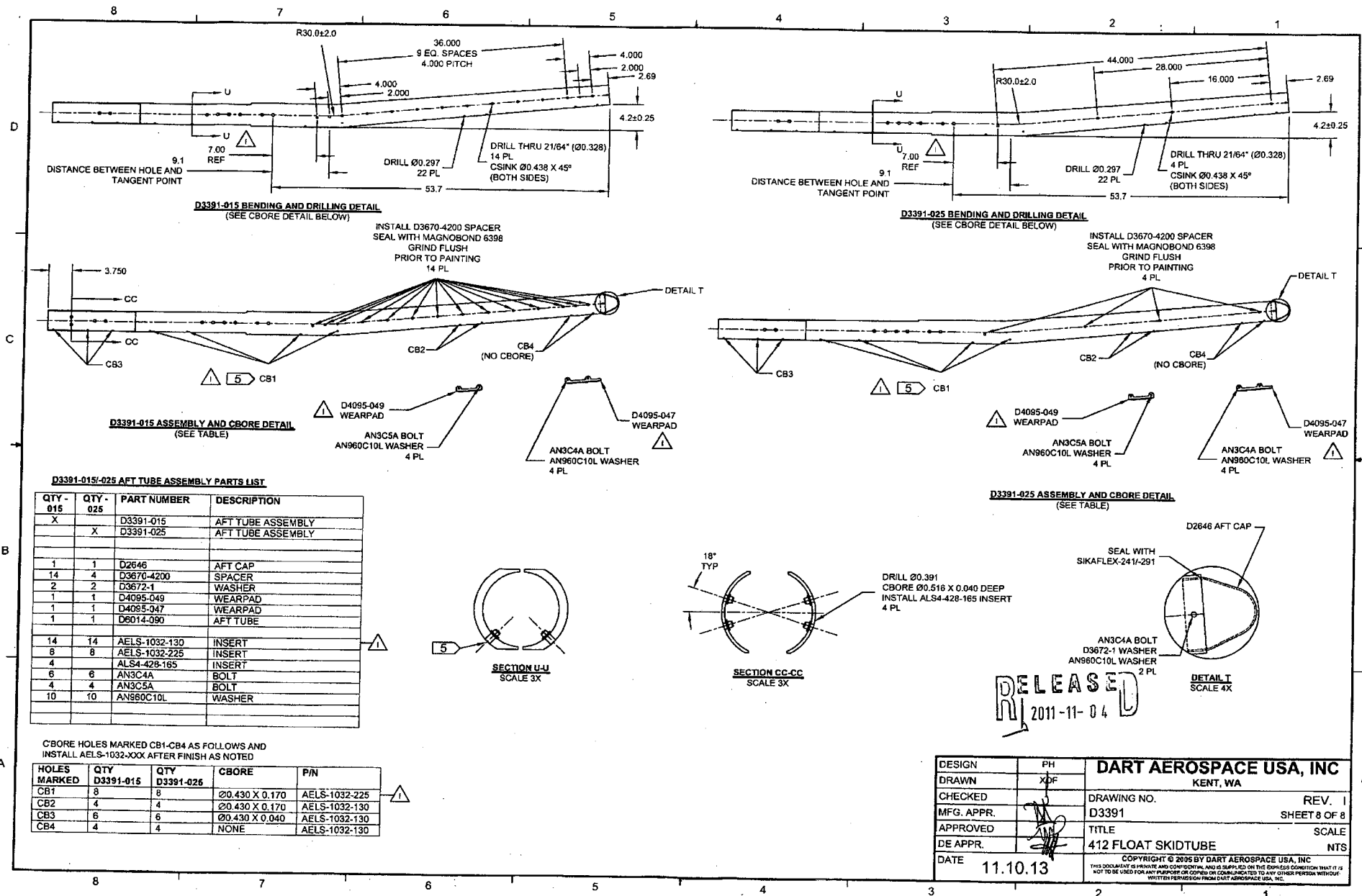
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**NOTE:** Date & initial all entries

NO. 277

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 75959  
Part number: D3391-023  
Description: Skid truck  
Welding Process: Tig~~[ ]~~ Mig~~[ ]~~  
Base material: Aluminum  
Current: AC~~[ ]~~ DC~~[ ]~~

TEST REQUIREMENTS AND RESULTS

Visual: pass~~[ ]~~ fail~~[ ]~~  
Penetration: pass~~[ ]~~ fail~~[ ]~~

UNACCEPTABLE

Cracks: pass~~[ ]~~ fail~~[ ]~~  
Undercut: pass~~[ ]~~ fail~~[ ]~~  
Pin holes: pass~~[ ]~~ fail~~[ ]~~  
Overlap (cold lap): pass~~[ ]~~ fail~~[ ]~~  
Porosity (surface): pass~~[ ]~~ fail~~[ ]~~  
Coloration: pass~~[ ]~~ fail~~[ ]~~

Qualifier Bob Elliott Date of Test Coupon 11-12-16

Welder Barclay Elliott Date of Test Coupon 11-12-16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld